

(i) Subject to approval by the permitting authority, you may conduct representative sampling of stacks when there are more than three stacks associated with a process.

**§ 63.7823 What test methods and other procedures must I use to demonstrate initial compliance with the opacity limits?**

(a) You must conduct each performance test that applies to your affected source according to the requirements in § 63.7(h)(5) and the conditions detailed in paragraphs (b) through (d) of this section.

(b) You must conduct each visible emissions performance test such that the opacity observations overlap with the performance test for particulate matter.

(c) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter plant discharge end or a blast furnace casthouse:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages. For a blast furnace casthouse, make observations during tapping of the furnace. Tapping begins when the furnace is opened, usually by creating a hole near the bottom of the furnace, and ends when the hole is plugged.

(d) To determine compliance with the applicable opacity limit in Table 1 to this subpart for BOPF shops:

(1) For an existing BOPF shop:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter except as specified in paragraphs (d)(1)(ii) and (iii) of this section.

(ii) Instead of procedures in section 2.4 of Method 9 in appendix A to part 60 of this chapter, record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles.

(iii) Instead of procedures in section 2.5 of Method 9 in appendix A to part 60 of this chapter, determine the 3-minute block average opacity from the average

of 12 consecutive observations recorded at 15-second intervals.

(2) For a new BOPF shop housing a bottom-blown BOPF:

(i) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(ii) Determine the highest and second highest sets of 6-minute block average opacities for each steel production cycle.

(3) For a new BOPF shop housing a top-blown BOPF:

(i) Determine the opacity of emissions according to the requirements for an existing BOPF shop in paragraphs (d)(1)(i) through (iii) of this section.

(ii) Determine the highest and second highest sets of 3-minute block average opacities for each steel production cycle.

(4) Opacity observations must cover the entire steel production cycle and must be made for at least three cycles. The steel production cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

(5) Determine and record the starting and stopping times of the steel production cycle.

(e) To determine compliance with the applicable opacity limit in Table 1 to this subpart for a sinter cooler at an existing sinter plant:

(1) Using a certified observer, determine the opacity of emissions according to Method 9 in appendix A to part 60 of this chapter.

(2) Obtain a minimum of 30 6-minute block averages.

(3) Make visible emission observations of uncovered portions of sinter plant coolers with the observer's line of sight generally in the direction of the center of the cooler.

[68 FR 27663, May 20, 2003, as amended at 71 FR 39586, July 13, 2006]

**§ 63.7824 What test methods and other procedures must I use to establish and demonstrate initial compliance with operating limits?**

(a) For each capture system subject to an operating limit in § 63.7790(b)(1), you must certify that the system operated during the performance test at the

site-specific operating limits established in your operation and maintenance plan using the procedures in paragraphs (a)(1) through (4) of this section.

(1) Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements specified in § 63.7830(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each opacity observation period segment.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(4) Certify in your performance test report that during all observation period segments, the capture system was operating at the values or settings established in your capture system operation and maintenance plan.

(b) For a venturi scrubber subject to operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you must establish site-specific operating limits according to the procedures in paragraphs (b)(1) and (2) of this section. You may establish the parametric monitoring limit during the initial performance test or during any other performance test run that meets the emission limit.

(1) Using the CPMS required in § 63.7830(c), measure and record the pressure drop and scrubber water flow rate during each run of the particulate matter performance test.

(2) Compute and record the hourly average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average pressure drop and scrubber water flow rate value in any of the three runs that meet the applicable emission limit.

(c) You may change the operating limits for a capture system or venturi scrubber if you meet the requirements in paragraphs (c)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emission limitation in Table 1 to this subpart.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) and (b) of this section for a control device or capture system.

(d) For each sinter plant subject to the operating limit for the oil content of the sinter plant feedstock in § 63.7790(d)(1), you must demonstrate initial compliance according to the procedures in paragraphs (d)(1) through (3) of this section.

(1) Sample the feedstock at least three times a day (once every 8 hours), composite the three samples each day, and analyze the composited samples using Method 9071B, “n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples,” (Revision 2, April 1998). Method 9071B is incorporated by reference (see § 63.14) and is published in EPA Publication SW-846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.” Record the sampling date and time, oil content values, and sinter produced (tons/day).

(2) Continue the sampling and analysis procedure for 30 consecutive days.

(3) Each day, compute and record the 30-day rolling average using that day’s value and the 29 previous daily values.

(e) To demonstrate initial compliance with the alternative operating limit for volatile organic compound emissions from the sinter plant windbox exhaust stream in § 63.7790(d)(2), follow the test methods and procedures in paragraphs (e)(1) through (5) of this section.

(1) Determine the volatile organic compound emissions according to the following test methods in appendix A to part 60 of this chapter:

(i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.

(ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 25 to determine the mass concentration of volatile organic compound emissions (total gaseous non-methane organics as carbon) from the sinter plant windbox exhaust stream stack.

(2) Determine volatile organic compound (VOC) emissions every 24 hours (from at least three samples taken at 8-hour intervals) using Method 25 in 40 CFR part 60, appendix A. Record the sampling date and time, sampling results, and sinter produced (tons/day).

(3) Compute the process-weighted mass emissions ( $E_v$ ) each day using Equation 1 of this section as follows:

$$E_v = \frac{M_c \times Q}{35.31 \times 454,000 \times K} \quad (\text{Eq. 1})$$

Where:

$E_v$  = Process-weighted mass emissions of volatile organic compounds, lb/ton;

$M_c$  = Average concentration of total gaseous nonmethane organics as carbon by Method 25 (40 CFR part 60, appendix A), milligrams per dry standard cubic meters (mg/dscm) for each day;

$Q$  = Volumetric flow rate of stack gas, dscf/hr;

35.31 = Conversion factor (dscf/dscm);

454,000 = Conversion factor (mg/lb); and

$K$  = Daily production rate of sinter, tons/hr.

(4) Continue the sampling and analysis procedures in paragraphs (e)(1) through (3) of this section for 30 consecutive days.

(5) Compute and record the 30-day rolling average of VOC emissions for each operating day.

(f) You may use an alternative test method to determine the oil content of the sinter plant feedstock or the volatile organic compound emissions from the sinter plant windbox exhaust stack if you have already demonstrated the equivalency of the alternative method for a specific plant and have received previous approval from the applicable permitting authority.

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**§ 63.7825 How do I demonstrate initial compliance with the emission limitations that apply to me?**

(a) For each affected source subject to an emission or opacity limit in Table 1 to this subpart, you have demonstrated initial compliance if:

(1) You meet the conditions in Table 2 to this subpart; and

(2) For each capture system subject to the operating limit in § 63.7790(b)(1), you have established appropriate site-specific operating limit(s) and have a record of the operating parameter data measured during the performance test in accordance with § 63.7824(a)(1); and

(3) For each venturi scrubber subject to the operating limits for pressure drop and scrubber water flow rate in § 63.7790(b)(2), you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with § 63.7824(b).

(b) For each existing or new sinter plant subject to the operating limit in § 63.7790(d)(1), you have demonstrated initial compliance if the 30-day rolling average of the oil content of the feedstock, measured during the initial performance test in accordance with § 63.7824(d) is no more than 0.02 percent. For each existing or new sinter plant subject to the alternative operating limit in § 63.7790(d)(2), you have demonstrated initial compliance if the 30-day rolling average of the volatile organic compound emissions from the sinter plant windbox exhaust stream, measured during the initial performance test in accordance with § 63.7824(e) is no more than 0.2 lb/ton of sinter produced.

(c) For each emission limitation that applies to you, you must submit a notification of compliance status according to § 63.7840(e).

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**§ 63.7826 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?**

(a) For a capture system applied to emissions from a sinter plant discharge end or blast furnace casthouse or to secondary emissions from a BOPF, you